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Conference Abstract

Using the IUCN Red List to Update The Hunterian Zoology Museum

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Abstract

The majority of the displays in The Hunterian Zoology Museum at the University of Glasgow date back to the late 1980s and since then, there have been no changes to the labels. This means that the content is often incorrect from a taxonomical point of view but perhaps more importantly they do not cover concepts such as endangered species. To improve this situation, in early 2023, an intervention-style display titled Extinction Crisis was opened to provide some up-to-date information about the conservation status of the species on display in the Zoology Museum. This was timed to follow the 15th Conference of the Parties (COP15) to the United Nations Convention on Biological Diversity, which took place in late 2022.

To update the displays, all specimens in the museum were checked for their current status in the International Union for the Conservation of Nature (IUCN) Red List of Threatened Species™. Of the more than 360 species on display (not including insects), over 20% were threatened at some level from Extinct to Near Threatened, another 16% were Data Deficient or Not Evaluated (Table 1).

One hundred specimens were chosen to have new labels added. This included all those at a risk level of Extinct, Critically Endangered, Endangered, Vulnerable and Near Threatened and examples of a few of the Least Concern, Data Deficient and Not Evaluated species. Labels were designed to be attached to the outside of cases or onto existing graphic panels as close to the appropriate specimen as possible. These were colour-coded to show the category and the threats causing the problem. A graphic panel

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was also added to explain the different categories and the extinction drivers or causes of declines (Fig. 1).

Table 1.

IUCN Red List category of specimens and species in the Zoology Museum.

Category	Number of specimens	Number of species
Extinct (beyond reasonable doubt that the species is no longer extant)	3	1
Critically Endangered (extreme risk of extinction due to particular circumstances)	16	12
Endangered (very high risk of extinction in the wild)	27	23
Vulnerable (high risk of extinction without intervention)	41	32
Near Threatened (could become endangered in the near future)	19	17
Least Concern (has been assessed and is still plentiful in the wild)	264	201
Data Deficient (has been assessed but not enough information is available about abundance and distribution)	2	2
Not evaluated (species has not yet been assessed)	61	59
Long extinct	19	17
Not identified to species (some specimens are only identified to genus or family level)	84	NA
Domestic (species is a domesticated breed)	2	2
TOTALS	**538**	**366**

Figure 1.

Extinction Crisis display graphic panel and labels on outside of cases.

Social media posts on Facebook and Instagram promoted the installation of this intervention, and I gave an online talk, which was recorded then shared on YouTube. This was well received and lecturers in the Zoology department asked if it could be adapted for a short module for undergraduate students.

A tour for the Bloomberg Connects app was developed, allowing visitors to conduct a self-guided tour of the museum or to visit virtually. This highlighted ten of the species on display and covered a wide taxonomic range from the Gippsland giant earthworm to the Eastern gorilla and a range of categories from Critically Endangered to Data Deficient. Each entry had a recorded audio file along with a transcript and photographs of the specimen.

Two activity sheets were also made, one was a search for ten animals (with different species from the app tour), using photos of the specimens and asking the user to find and circle their threat category level. The other gave clues to a further ten species and asked the user to write down the animals' names and then unscramble select letters to find an eleventh species. These have been popular with visitors since their introduction and to avoid unnecessary waste of printing multiple copies, the sheets are presented inside reuseable dry erase pockets with refillable dry erase pens. Fig. 2

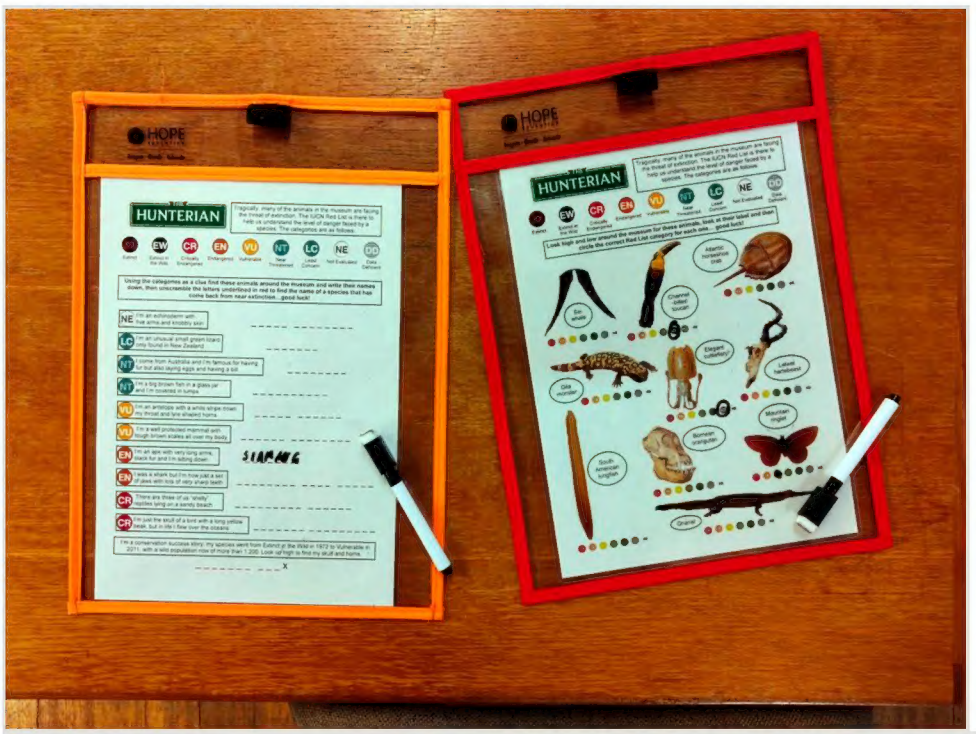

Figure 2.

Activity sheets for Red List-based word search and trail.

The new labels have also been used as the basis for visits by school groups. Children were sent around the museum to collect removable versions of the labels, which they then used to discuss the different extinction drivers, such as overharvesting, habitat loss or pollution. In general, visitors have expressed approval and much interest in the new labels and how they have been added without negatively impacting the existing display style, which many people have come to love and appreciate for its now old-fashioned look.

Assessment of the project over the last year has revealed a minor problem with the labels, in the way the extinction drivers are listed, as they were indicated by numbers rather than symbols, so the reader has to refer back to the main panel to understand them. However, in most other respects it has been a successful method of reinvigorating old displays for minimal cost and has exposed more students and visitors to the IUCN Red List.

Keywords

display intervention, endangered species

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Conflicts of interest

The authors have declared that no competing interests exist.